



PATENT
Attorney Docket No. 210874

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OCT 10 2002

In re Application of:

GERSHO, et al.

Group Art Unit: 2654

Technology Center 2600

Application No. 09/401,068

Examiner: Armstrong, Angela, A.

Filed: September 22, 1999

For: LPC-HARMONIC VOCODER WITH
SUPERFRAME STRUCTURE

Certificate of Mailing

I hereby certify that this INFORMATION DISCLOSURE STATEMENT (along with any documents referred to as being enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231

Date 10/4/02

Susan Mats

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Washington, D.C. 20231

Pursuant to 37 CFR 1.97 and 1.98, the references listed on the enclosed Form PTO-1449 and/or Substitute Form PTO-1449 ("Form 1449") are submitted for consideration by the Examiner in the examination of the above-identified patent application.

The full consideration of the references in their entirety by the Examiner is respectfully requested and encouraged. Also, it is respectfully requested that the references be entered into the record of the present application and that the Examiner place his or her initials in the appropriate area on the enclosed Form 1449, thereby indicating the Examiner's consideration of each of the references.

The submission of the references listed on the Form 1449 is for the purpose of providing a complete record and is not a concession that the references listed thereon are prior art to the invention claimed in the patent application. The right is expressly reserved to establish an invention date earlier than the above-identified filing date in order to remove any reference submitted herewith as prior art should it be deemed appropriate to do so.

Further, the submission of the references is not to be taken as a concession that any reference represents art that is relevant or analogous to the claimed invention. Accordingly, the right to argue that any reference is not properly within the scope of prior art relevant to an examination of the claims in the above-identified application is also expressly reserved.

The Information Disclosure Statement is being filed:

- ☐ **within** any one of the following time periods: (a) within three months of the filing date of a national application other than a continued prosecution application under 37 CFR 1.53(d); (b) within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 of an international application; (c) before the mailing date

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of a first Office Action on the merits; or (d) before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.

- ☒ **after** (a), (b), (c) or (d) above, but before the mailing date of a final action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an action that otherwise closes prosecution in the application, and includes *one* of:

☐ the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below).

or

☒ the fee of \$180 set forth in 37 CFR 1.17(p) (see "Fees" below).

- ☐ **after** the mailing date of a final action under 37 CFR 1.113 or a Notice of Allowance under 37 CFR 1.311, or an action that otherwise closes prosecution in the application, and on or before payment of the issue fee, and includes the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below), and the fee of \$180 as set forth in 37 CFR 1.17(p) (see "Fees" below).

- ☐ **after** the mailing date of a Notice of Allowance under 37 CFR 1.311, and on or before payment of the issue fee, and **within** thirty days of receiving each item of information contained in the Information Disclosure Statement, and includes the Statement under 37 CFR 1.704(d) (see "Statement under 37 CFR 1.704(d)" below), and the fee of \$180 as set forth in 37 CFR 1.17(p) (see "Fees" below).

NOTE: This is for original applications except applications for a design patent, filed on or after May 29, 2000, wherein a paper containing only an Information Disclosure Statement in compliance with 37 CFR 1.97 and 1.98 is being filed.

Copies of the References

- ☒ Copies of the references listed on the enclosed Form 1449 are enclosed herewith. Attached to each reference not in the English language is a concise explanation of the relevance pursuant to 37 CFR 1.98(a)(3). An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of the relevance pursuant to 37 CFR 1.98(a)(3).

- ☐ A copy of the foreign search report is enclosed herewith.

- ☐ The references listed on the enclosed Form 1449 were previously identified in the parent application(s) of the present application, and copies of the references were furnished at that time. Accordingly, additional copies of the references are not submitted herewith, so as not to burden the file with duplicate copies of references. The Examiner is respectfully requested to carefully review the references in accordance with the requirements set out in the Manual of Patent Examining Procedure. In accordance with 37 CFR 1.98(d), the details of the parent application(s) relied upon for an earlier filing date under 35 USC 120 in which copies of the references were previously furnished are set out below:

U.S. APPLICATIONS		Status (<i>check one</i>)		
U.S. APPLICATIONS	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
1.				
2.				
3.				

Statement under 37 CFR 1.97(e)

- ☐ The **undersigned** hereby states that each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of the Information Disclosure Statement.
- ☐ The **undersigned** hereby states that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the Information Disclosure Statement.

Statement under 37 CFR 1.704(d)

- ☐ The **undersigned** hereby states that each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 CFR 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.

Fees

- ☐ No fee is owed by the applicant(s).
- ☒ The **IDS Fee of \$180** under 37 CFR 1.17(p) is enclosed herewith.

Method of Payment of Fees

- ☐ Attached is a check in the amount of \$.
- ☒ Charge Deposit Account No. 12-1216 in the amount of \$180.00. (A duplicate copy of this communication is enclosed for that purpose.)

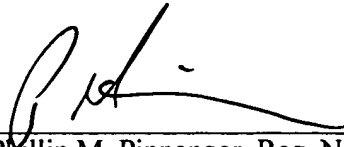
Authorization to Charge Additional Fees

- ☒ If any additional fees are owed in connection with this communication, please charge Deposit Account No. 12-1216. (A duplicate copy of this communication is enclosed for that purpose.)

Instructions as to Overpayment

In re Appln. of Gersho et al.
Application No. 09/401,068

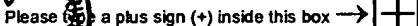
☒ Credit Account No. 12-1216.
☐ Refund



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Date: October 4, 2002

IDS (Rev. 2/27/2002)



(Use as many sheets as necessary)

Sheet

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of

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Application Number

09/401.068

Filing Date

September 22, 1999

First Named Inventor

GERSHO, et al.

Group Art Unit

2654

Examiner Name

A. Armstrong

Attorney Docket Number

210874

[illegible][illegible]

Examiner Initials	Doc. No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published.	Translation	
			Yes	No**
	A D	GERSHO, A., "Advances In Speech and Audio Compression", <i>Proceedings of the IEEE</i> , Vol. 82(6):900-918 (June 1994).		
	A E	McCREE, et al., "A 2.4 KBIT/S MELP Coder Candidate for the New U.S. Federal Standard", <i>1996 IEEE International Conference on Acoustics, Speech, and Signal Processing Conference Proceedings</i> , Atlanta, GA (Cat. No. 96CH35903), Vol. 1, pp. 200-203, 7-10 May 1996.		
	A F	SUPPLEE, L.M., et al., "MELP: The New Federal Standard at 2400 BPS", <i>1997 IEEE International Conference on Acoustics, Speech and Signal Processing Proceedings</i> (Cat. No. 97CB36052), Munich, Germany, Vol. 2, pp. 21-24, April 1997.		

Date Considered

- * A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3).
- + An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).

EJC81
 OCT 07 2002
 PATENT & TRADEMARK

Please type a plus sign (+) inside this box → +

SUBSTITUTE for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
Application Number		09/401,068		RECEIVED OCT 10 2002 Technology Center 2600	
Filing Date		September 22, 1999			
First Named Inventor		GERSHO, et al.			
Group Art Unit		2654			
Examiner Name		A. Armstrong			
Attorney Docket Number		210874			
Sheet	2	of	2		

OTHER - NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Doc. No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published.	Translation		
			Yes	No**	
	AG	McCREE, A.V., et al., "A Mixed Excitation LPC Vocoder Model for Low Bit Rate Speech Coding", <i>IEEE Transaction on Speech and Audio Processing</i> , Vol. 3(4):242-250 (July 1995).			
	AH	SUPPLEE, Lyn M. et al., "MELP: THE NEW FEDERAL STANDARD AT 2400 BPS", <i>IEEE</i> 1997, pp. 1591-1594 in lieu of the following which we are unable to obtain Specification for the Analog to Digital Conversation of Voice by 2,400 Bit/Second Mixed Excitation Linear Prediction FIPS, Draft document of proposed Federal Standard, dated May 28, 1998.			
	AI	GERSHO, A., et al., "Vector Quantization and Signal Compression", Dordrecht, Netherlands, Kluwer Academic Publishers, 1992, xxii+732pp.			
	AJ	LeBLANC, W.P., et al., "Efficient Search and Design Procedures for Robust Multi-Stage VQ of LPC Parameters for 4 KB/S Speech Coding". In <i>IEEE Trans. Speech & Audio Processing</i> , Vol. 1, pp. 272-285, (October 1993).			
	AK	MOUY, B.M.; De La NOURE, P.E., "Voice Transmission at a Very Low Bit Rate on A Noisy Channel: 800 BPS Vocoder with Error Protection to 1200 BPS", <i>ICASSP-92: 1992 IEEE International Conference on Acoustics, Speech, and Signal</i> , San Francisco, CA, USA, 23-26 March 1992, New York, NY, USA: <i>IEEE</i> , 1992 Vol. 2, pp. 149-152.			
	AL	MOUY, B. et al., "Nato Stanag 4479: A Standard For An 800 BPS Vocoder and Channel Coding In HF-ECCM System", 1995 International Conference on Acoustics, Speech, and Signal Processing Conference Proceedings, Detroit MI, USA, 9-12 May 1999; New York, NY, USA: <i>IEEE</i> , 1995, Vol. 1, pp. 480-483.			
	AM	KEMP, D.P.; COLLURA J.S.; TREMAIN, T.E., "Multi-Frame Coding of LPC Acoustics, Speech, and Signal Processing, Toronto, Ont., Canada, 14-17 May 1991; New York, N.Y. USA, <i>IEEE</i> , 1991, Vol. 1, pp. 609-612.			
	AN	HARDWICK, J.C.; LIM, J.S., "A 4.8 KBPS Multi-Band Excitation Speech Coder", <i>ICASSP 1988 International Conference on Acoustics, Speech, and Signal</i> , New York, NY, USA, 11-14 April 1988; <i>IEEE</i> , Vol. 1, pp. 374-377.			
	AO	NISHIGUCHI, L.; IJIMA, K.; MATSUMOTO, J., "Harmonic Vector Excitation Coding of Speech at 2.0 KPS", <i>1997 IEEE Workshop on Speech coding for telecommunication proceedings</i> , Pocono Manor, PA, USA, 7-10 September 1997, New York, NY, USA: <i>IEEE</i> , 1997, pp.39-40.			
	AP	NOMURA, T.; IWADARE, M.; SERIZAWA, M.; OZAWA, K., "a Bitrate and Bandwidth Scalable Celp Coder", <i>ICASSP 1998 International Conference on Acoustics, Speech, and Signal</i> , Seattle, WA, USA, 12-15 May 1998, <i>IEEE</i> , 1998, Vol. 1, pp. 341-344.			

Examiner Signature	Date Considered
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+ An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).